

REMARKS

Claims 1-9 are currently pending in this application. Applicants note with appreciation withdrawal of the §102 and §103 rejections of the previous Office Action. Claim 1 is amended to indicate that reflected light is measured, and the clear paint film does not reduce the amount of light reflected from the base metal sheet, even when it is combined with an under clear coat and/or top coat. No new matter is added; support for this amendment can be found at page 3, lines 24-29; page 7, lines 5-6; page 8, lines 18-19; and numerous other places in the specification.

35 U.S.C. §112 Rejections

Claims 1-9 are rejected under 35 U.S.C. § 112, first paragraph, as being indefinite. It is asserted in the Office Action that the limitation "clear paint film does not reduce the brightness of the base metal sheet" is unclear in view of the fact that the paint may contain a pigment. It is further asserted that this limitation is also indefinite because it is not clear how the incident light in (L_{in}) and light out (L_{out}) are measured. Applicants respectfully traverse this rejection as it may pertain to the amended claims and submit that Claims 1-9 are not indefinite.

The clear paint film of the present invention includes transparent or translucent inorganic flakes coated with transparent or translucent metal oxide layers, dispersed in the film as an interference colorant. Since the flakes do not absorb light, the intensity of reflected light is substantially equal to the intensity of incident light. This property of the clear paint film of the present invention is explained extensively throughout the specification, and specifically beginning at page 7, line 4 onward. Applicants have amended Claim 1 to clarify that it is reflected light that is being measured, and that the reflected light is not substantially reduced by the use of the clear paint film of the present invention, alone or in combination with other layers. Applicants submit that the term "substantially" is not indefinite. One skilled in the art would understand this term to mean a value within 95%, plus or minus, of

the value of light reflected off the base metal sheet. Applicants respectfully submit that this aspect of the invention is not unclear or indefinite.

It is asserted in the Office Action that it is unclear how the clear paint film does not reduce the brightness of the underlying metal sheet, if the film further contains a pigment or other additive. However, as noted in the specification at page 9, line 28 - page 10, line 1, such pigments or other additives are added in amounts so as not to reduce the transparency of the clear paint film. One skilled in the art can easily determine how much of an additive or pigment to use without affecting the transparency of the film by measuring the brightness of the metal sheet with varying levels of pigment or additive. Obviously, if one were to add higher amounts of additional ingredients, outside the scope of the present invention, this property would not be maintained.

It is also asserted in the Office Action that it is unclear how to interpret "substantially equal" (in reference to L_{in} and L_{out}) because it is unclear how brightness is measured. At page 16, lines 12-13, a method of measuring brightness is described, using a spectrum colorimeter. Other techniques for measuring various properties of light are described throughout the examples. For example, at page 23 lines 9-11, use of a digital luster meter is described. Additionally, Applicants respectfully submit that numerous methods and instruments are available for measuring reflected light. As can be seen from the attached Internet Web pages, techniques for measurement of light are well known and well within the ability of one skilled in the art. Thus, the determination of when L_{in} and L_{out} are substantially equal is also within the ability of one skilled in the art. As noted previously, the term "substantially" is understood to mean within a 95% range.

Applicants respectfully submit that Claims 1-9 are not indefinite or unclear and request withdrawal of this basis of rejection.

Claims 1-9 are also rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. It is asserted in the Office Action that Panush (US

4,615,940) suggests that an opalescent effect cannot be obtained when a paint film having a color value outside the N-4 to N-8 range on the Munsell color chart is used, and that it is unclear how Applicants have obtained the interference coloring effect outside the color values disclosed as critical in the prior art. Applicants traverse this rejection and respectfully submit that the present claims are enabled.

The color values of Panush referred to in the Office Action are a property of the base coat paint, a base coat that contains a conventional pigment (as stated at column 5 line 43), used in an amount of 15-50% by weight in the primer coat film (col. 5, line 59). The clear paint film of the present invention does not include conventional pigments in these amounts, and provides color through the use of oxide-coated flakes, and the color is controlled by the thickness of the oxide layer (page 2, lines 26-28). Therefore, the Munsell color values of Panush are irrelevant to the present invention. Applicants' previous argument with respect to Munsell color values is not inconsistent with this position. The primer coat of Panush has a pigment within the stated range, while the clear paint film of the present invention does not have a pigment and, therefore, does not meet this requirement. Additionally, the interference coat in Panush permits penetration of light to the colored base coat, rather than to the underlying metal sheet, as in the present invention. At column 8, lines 23-25, Panush discloses the various properties of the interference coat that are necessary to permit penetration of light to the colored base coat and provide the opalescent effect. Thus, Panush explains exactly how to obtain the interference coloring effect, and provides evidence that interference coloring is realized by dispersion of an interference colorant in a paint film regardless of Munsell's value, even when a paint film to be imparted with an opalescent effect does not have a colored appearance. As can be seen by comparing the present invention to the method of achieving opalescence in Panush as described at column 8, lines 18-44, the method in Panush differs from the method of the present invention. However, this does not mean that the method of the present invention does not work; in fact,

Appl. No. 10/606,445
Amdt. dated June 28, 2005
Reply to Office Action of February 8, 2005
Attorney Docket No. 2204-031174

by following the examples set forth in the instant specification, one skilled in the art can easily practice the present invention and achieve the desired effect.

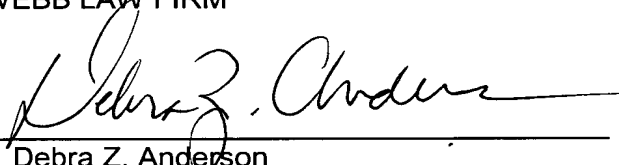
Applicants respectfully submit that the present invention is fully enabled. A complete description of how to make and use the clear paint films of the present invention is provided in the specification. One skilled in the art could practice the claimed invention based on the level of skill in the art and guidance provided in the specification. Applicants respectfully request withdrawal of this basis of rejection.

Applicants respectfully submit that Claims 1-9 meet all requirements under Section 112 of the statute. Accordingly, Claims 1-9 are in condition for allowance; such action is respectfully requested at an early date.

Respectfully submitted,

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